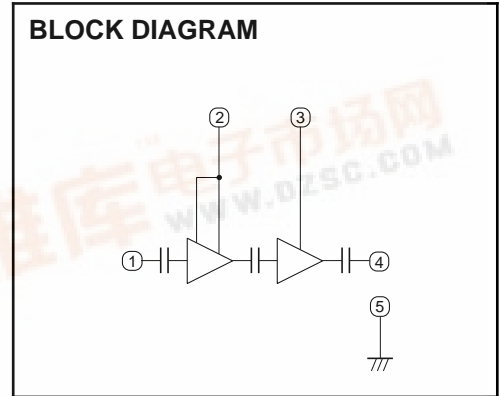
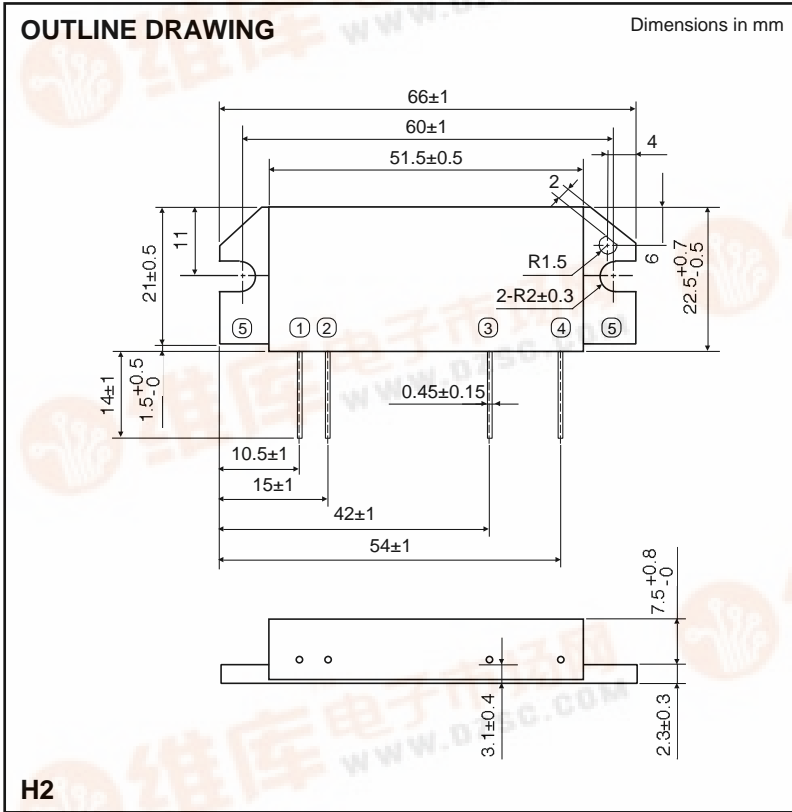


MITSUBISHI RF POWER MODULE

M68750

144-148MHz, 12.5V, 27W, FM MOBILE RADIO



- PIN:
- ① Pin : RF INPUT
  - ② VCC1: 1st. DC SUPPLY
  - ③ VCC2: 2nd. DC SUPPLY
  - ④ Po : RF OUTPUT
  - ⑤ GND: FIN

**ABSOLUTE MAXIMUM RATINGS** (Tc=25°C unless otherwise noted)

Symbol	Parameter	Conditions	Ratings	Unit
Vcc	Supply voltage	ZG=ZL=50	17	V
Icc	Total current	ZG=ZL=50	7	A
P <sub>in</sub> (max)	Input power	ZG=ZL=50 , Vcc1 12.5V	400	mW
P <sub>O</sub> (max)	Output power	ZG=ZL=50 , Vcc1 12.5V	40	W
T <sub>C</sub> (OP)	Operation case temperature	ZG=ZL=50 , Vcc1 12.5V	-30 to +110	°C
T <sub>stg</sub>	Storage temperature		-40 to +110	°C

Note. Above parameters are guaranteed independently.

**ELECTRICAL CHARACTERISTICS** (Tc=25°C unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range		144	148	MHz
P <sub>O</sub>	Output power	Vcc1=Vcc2=12.5V, P <sub>in</sub> =200mW ZG=ZL=50	27		W
η	Total efficiency		50		%
2f <sub>o</sub>	2nd. harmonic			-25	dBc
3f <sub>o</sub>	3rd. harmonic			-30	dBc
in	Input VSWR			2.8	-
	Load VSWR tolerance	Vcc1=Vcc2=15.2V P <sub>O</sub> =30W (P <sub>in</sub> :controlled), ZG=50 Load VSWR=20:1 (All phase)	No degradation or destroy		-

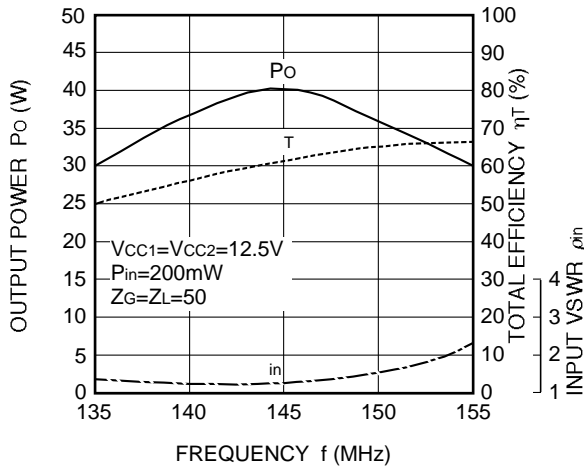
Note. Above parameters, ratings, limits and test conditions are subject to change.

MITSUBISHI RF POWER MODULE  
**M68750**

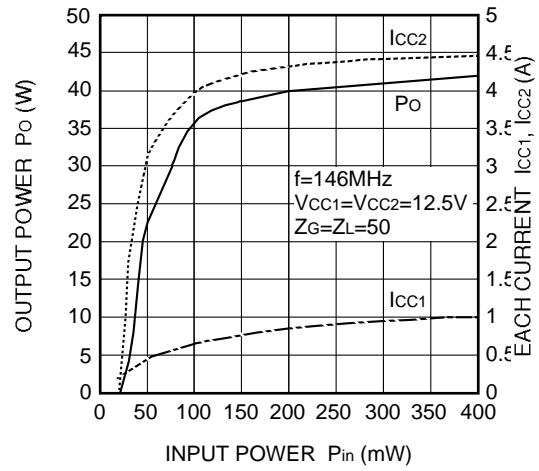
144-148MHz, 12.5V, 27W, FM MOBILE RADIO

**TYPICAL PERFORMANCE DATA**

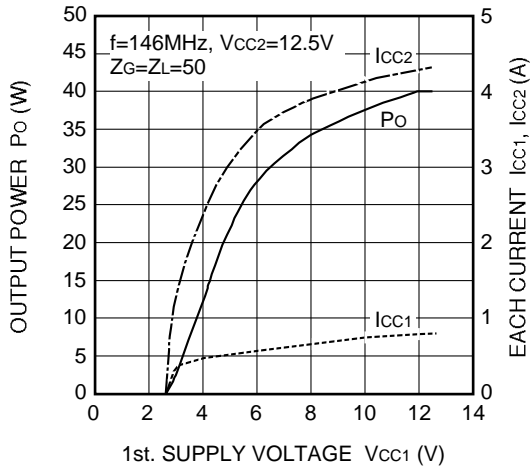
**OUTPUT POWER, TOTAL EFFICIENCY, INPUT VSWR VS. FREQUENCY**



**OUTPUT POWER, EACH CURRENT VS. INPUT POWER**



**OUTPUT POWER, EACH CURRENT VS. 1st. SUPPLY VOLTAGE**



**OUTPUT POWER, 2nd. CURRENT VS. 2nd. SUPPLY VOLTAGE**

